Improving Assessments for Fetal Alcohol Spectrum Disorder in Canada; An Approach to Co-Morbid Psychiatric Diagnoses and Treatment for Children in Care

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Presenter Disclosure

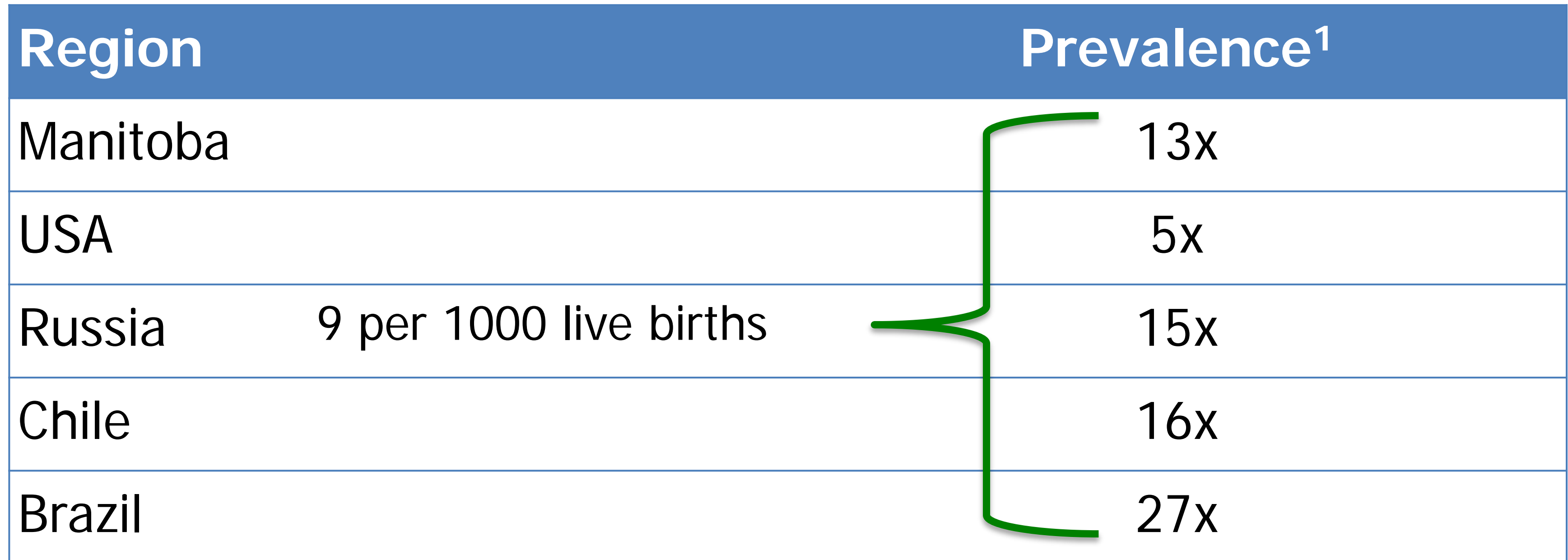
- Mitesh Patel & Sabrina Agnihotri
- No conflicts of interest/relationship with commercial interests to disclose

Session Objectives

1. Describe our 3-phase multidisciplinary approach to diagnosing FASD for youth in care through CAST services

1. Summarize preliminary demographic information, psychiatric comorbidity, medication considerations and treatment strategies provided

Prevalence of FASD in Children and Youth in Care



Region		Prevalence[1]
Manitoba		13x
USA		5x
Russia	9 per 1000 live births	15x
Chile		16x
Brazil		27x

FASD prevalence in Canada (2018):

- 2-3% of elementary school-aged children[1]
- 4% of general population[2]

Psychiatric Co-Morbidity

Comorbidity	Weighted Prevalence from Studies: Average (%)	SE	LL	UL	Population Prevalence (%)
ADHD	50.2	3.5	43.4	57.1	5.0
ID	23.0	3.8	15.6	30.3	1.0
Learning disorder	19.9	4.2	11.6	28.2	10.0
Oppositional defiant disorder	16.3	2.2	11.9	20.6	3.3
Depression	14.1	3.7	6.9	21.3	3.5
Psychotic Disorder	12.3	3.9	4.7	19.8	0.5
Bipolar Disorder	8.6	3.4	2.0	15.2	2.7
Anxiety disorder	7.8	2.0	3.9	11.8	0.7
PTSD	6.0	1.0	4.0	8.0	4.0
Obsessive compulsive disorder	4.9	3.0	−1.1	10.9	1.2
Reactive attachment disorder	4.7	0.8	3.1	6.3	0.5

Adapted from: Weyrauch et al. (2017)[4]

- Limited research exclusively in youth with FASD in care
  - Chasnoff et al. (2015)[3]
    - 94% had co-occurring mental health diagnosis
    - 67% had 2 or more

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  - Chasnoff et al. (2015)[3]
    - 94% had co-occurring mental health diagnosis
    - 67% had 2 or more
  - Foster care placement + multiple home transitions = significant predictors in development of externalizing disorders[5]

What is Needed?

- More research regarding the incidence of FASD in youth who engage with formal care systems and their related psychiatric co-morbidities
- Consider psychiatric assessment in FASD as part of diagnostic process for youth in care

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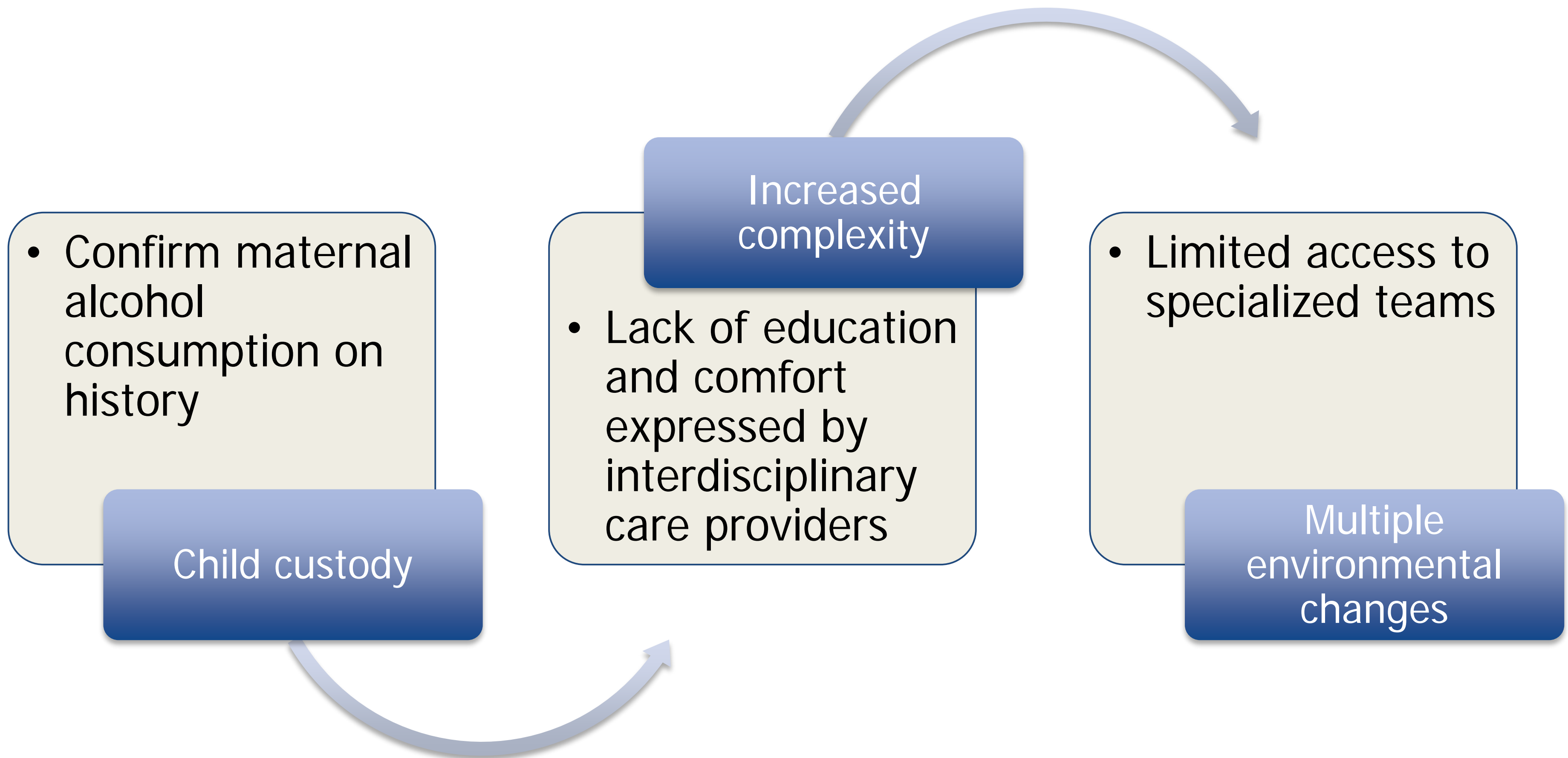
Barriers to Diagnosis of FASD for Youth in Care



Children's Aid Society of Toronto (CAST)

- Multidisciplinary assessment model created (March 2016) in response to lack of access to specialized diagnostic teams for youth in care suspected of prenatal alcohol exposure

- Assessment procedure expanded to include screening by child protection workers (CPW)

- Complex Case Reviews and other resources employed to operationalize a consistent method of screening

- Priority placed on psychiatric co-morbidity assessment and treatment planning as youth progressed through formal care system

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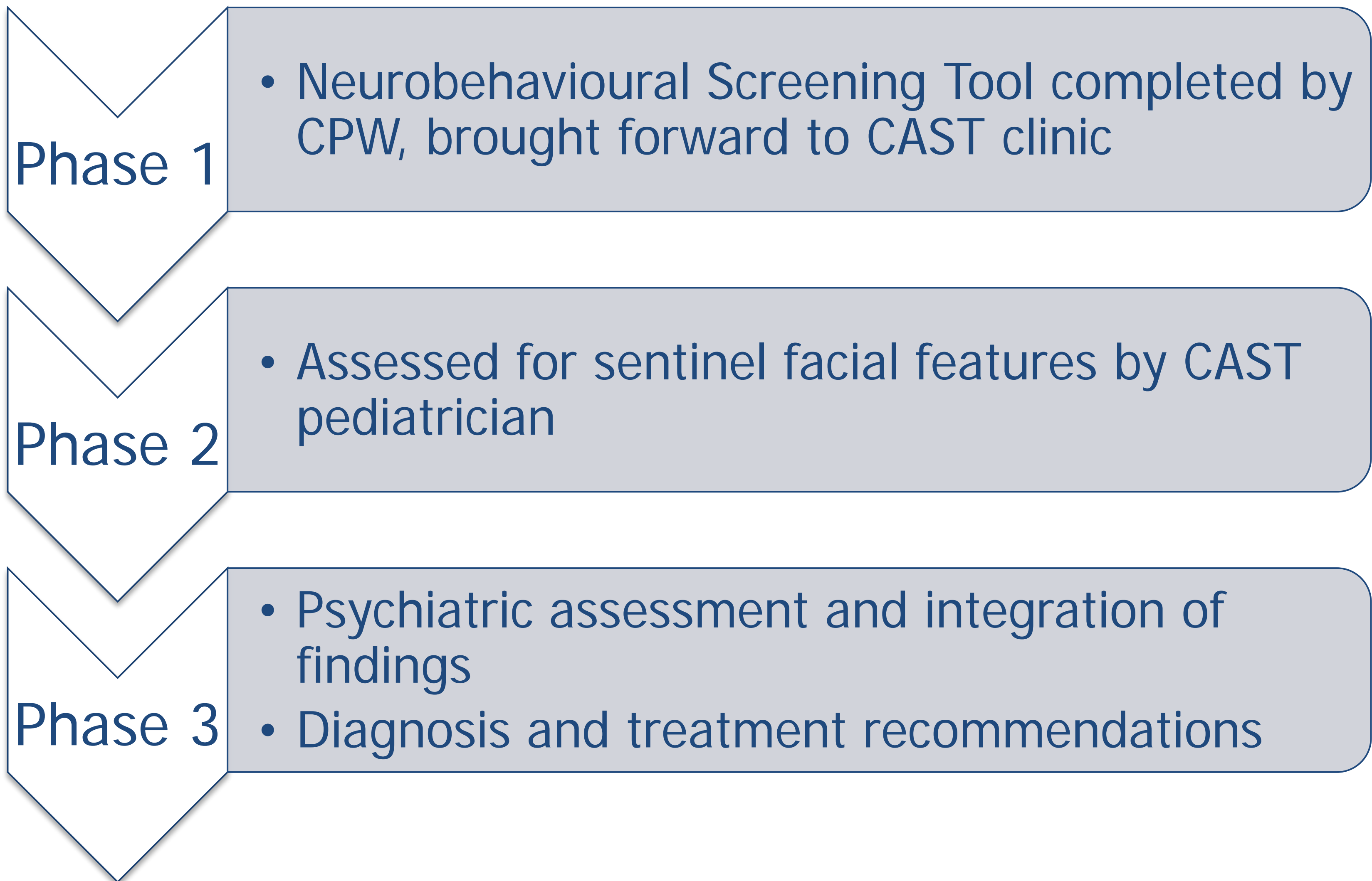
CAST FASD Assessment Model



Phase 1 - Neurobehavioural Screening Tool[6]

- Completed by the CPW

Neurobehavioural Screening Tool

NAME: ______ DATE OF BIRTH:

Have you or any adult involved in the care of this child/youth

1. Has this child/youth been seen or accused of or thought to have acted too young for his or her age? *Place a check in **all columns** if "YES" was endorsed*	YES	NO
2. Has this child/youth been seen or accused of or is thought to be disobedient at home? *Place a check in **columns "A" and "C"** if "YES" was endorsed*	YES	NO
3. Has this child/youth been seen or accused of or is thought to lie or cheat? 4. Has this child/youth been seen or accused of or is thought to lack guilt after misbehaving?	YES YES	NO NO

Phase 1 - Neurobehavioural Screening Tool[6]

- Completed by the CPW
- CPW calls for appointment + completes referral form
- Case reviewed by pediatrician for approval

Phase 2 – Pediatrician Assessment

- Measurements for sentinel facial features and 5-point scale of the Washington Lip-Philtrum Guide

CMAJ GUIDELINES CME

Fetal alcohol spectrum disorder: a guideline for diagnosis across the lifespan

Jocelynn L. Cook PhD, Courtney R. Green PhD, Christine M. Lilley PhD, Sally M. Anderson PhD, Mary Ellen Baldwin, Albert E. Chudley MD, Julianne L. Conry PhD, Nicole LeBlanc MD, Christine A. Loock MD, Jan Lutke, Bernadene F. Mallon MSW, Audrey A. McFarlane MBA, Valerie K. Temple PhD, Ted Rosales MD; for the Canada Fetal Alcohol Spectrum Disorder Research Network

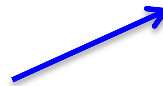
Phase 2 – Pediatrician Assessment

- Measurements for sentinel facial features and 5-point scale of the Washington Lip-Philtrum Guide
- Full medical history and physical exam
- History of exposure to alcohol during pregnancy:
  - review of CAST records
  - direct maternal verification
  - alcohol related diagnosis or treatment during pregnancy
  - results of urine/meconium testing for alcohol at birth
  - removal of child by CAST due to maternal alcohol abuse or heavy drinking during pregnancy

Phase 3 – Psychiatric Assessment

CPW
Caregiver
Child/youth
Psychiatrist

Questionnaire item
Forgetting details of things done regularly
Getting details of things told mixed up
Getting lost, making wrong turns in a relatively new place
Needing to check whether something has been done
Doing some routine thing twice
Repeating things, asking same question twice
Forgetting to do planned things
Telling a story or joke twice
Letting self ramble on
Failing to recognize familiar places
Getting lost, making wrong turns in a familiar place
Finding that famous faces look unfamiliar
Forgetting something told recently; needs reminding
Forgetting to tell important messages
Forgetting where things are kept
Forgetting important details of events happening the day before
Difficulty in picking up new skills
Failing to recognize close friends
Losing things around the house
Losing track of theme of a written story
Forgetting to take things, leaving behind
Finding words "on tip of tongue"
Forgetting just when something happened
Finding a TV story difficult to follow
Starting to read a book read before
Losing thread of conversation
Forgetting important personal details
Forgetting changes in daily routines



Past psychiatric history
Past medical history
Medications
Forensic and substance use history
Social and developmental history
Presenting mental health concerns
Previous psychological reports

Integrated with available physical examination and psychological test results

Final Diagnosis and Recommendations

Psychiatric opinion provided impressions regarding:

1. Presence or absence of CNS impairment
2. Presence or absence of psychiatric comorbidities using DSM-V criteria
3. Treatment recommendations inclusive of psychopharmaceutical and psychotherapeutic interventions, as well as sociobehavioral and environmental considerations

Summary of Cases Assessed from March 2016 – November 2017

Cases Assessed

	n = 23
Mean age in years (SD)	9.22(+/-3.75)
• Maximum age	15
• Minimum age	3
Gender	
• Male	9(50%)
• Female	8(44%)
• Transgender	1(6%)
Confirmed PEA	13(72%)
FASD Diagnoses	14(78%)
• Confirmed PEA and sentinel facial features	9
• Confirmed PEA without facial features, but CNS impairment	4
• Unknown PEA with sentinel facial features and CNS impairment	1
IQ	
• FASD Group (n=14)	70(+/-10.3)
• No Diagnosis (n=4)	83.5(+/-4.95)
Comorbidities	18(100%)
• ADHD	10(56%)
• Learning Disabilities	4(22%)
• Tic Disorder	3(17%)
• Conduct Disorder	3(17%)
• Oppositional Defiant Disorder	2(11%)
• Intellectual Disability	2(11%)
• Major Depressive Disorder	2(11%)
• Substance Use Disorder	1(6%)
• Adjustment Disorder	1(6%)
• Speech or Language Disorder	1(6%)

Cases Assessed

	n = 18
Guardianship	
• Foster parents	14(78%)
• Group home	3(17%)
• Adoptive parents	1(5%)
Number of Environmental Changes	
• 1	3(17%)
• 2	8(44%)
• 3	4(22%)
• >3	3(17%)
Number of Foster Homes	
• 0	3(17%)
• 1	10(56%)
• 2	4(22%)
• 3	1(6%)
Full Psychological Assessment Received Previously	13(72%)

Treatment Recommendations

	n = 18
Medications	
• No Changes	7(39%)
• Add New Medication	7(39%)
• Add Stimulant	3(17%)
• Lower Dose of Current Medication	1(6%)
• Increase Dose of Current Medication	2(11%)
Psychotherapeutic Intervention	
• CBT	6(33%)
• Behavioral Therapy	8(44%)
• Animal Therapy	4(22%)
• Play Therapy	8(44%)
• Speech-Language Pathology	4(22%)
• Combination of CBT/Behavioral/Play/Animal	10(56%)
Social Intervention	
• No changes	7(39%)
• Recreational Therapy	8(44%)
• Nonspecific Group Therapy	3(17%)
Psychoeducational Intervention	
• Assessment for new IEP	4(22%)
• Continue current IEP	8(44%)
Placement Considerations	
• Co-parenting with Family Placement	1(6%)
• High Parent:Child Ratio	1(6%)
• Intense Supervision	2(11%)
• Visitations with Biological Mother	1(6%)

13 (72%)

Treatment Recommendations

	FASD (n=14)	No Diagnosis (n=4)
Medication changes	7(50%)	1(25%)
Psychotherapeutic intervention	14(100%)	4(100%)
Social intervention	6(43%)	4(100%)
Placement considerations	6(43%)	0
Psychoeducational testing	10(71%)	2(50%)

Implications

1. Current assessment model tied together pre-existing services offered by a community children's aid centre to help facilitate the process of FASD diagnosis and treatment

1. 78% of youth suspected by CPW and pediatrician of diagnosis of FASD using the NST were determined to have met criteria

1. Psychiatric comorbidity was present in all youth referred for consideration of an FASD diagnosis and resulted in further psychiatric treatment recommendations

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Key Messages

- Current findings supports the value of an integrated community assessment approach that achieves early diagnosis and treatment of youth in care who are queried for a diagnosis of FASD
- Screening by CPWs facilitated this process
- We encourage that youth who access formal care systems be screened for FASD by their CPW and provided with appropriate pediatric and psychiatric assessments

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CHILDREN'S AID SOCIETY *of* TORONTO

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